

CLAIMS

1. A heald frame (2) for a weaving machine (M), said frame comprising two posts (4, 4') and two cross-members (6, 6'), each of which is equipped with a heald-carrying bar (8), while there are provided means for fixing at least one post relative to at least one corresponding cross-member, the fixing means comprising a protrusion (4₁) from the post (4), which protrusion (4₁) is suitable for being received at least partly in a recess (V) formed in the cross-member (6), and also means (18, 20) for the mutual retention of the post and the cross-member, wherein said fixing means further comprise an intermediate tubular fixing element (14) accommodated in an indentation (12) formed in the cross-member (6), the tubular element (14) defining an internal volume (V) which forms said recess for receiving at least part of said protrusion (4₁), while there are provided means for the mutual connection of the tubular fixing element (14) and the cross-member (6).

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2. The frame as claimed in claim 1, wherein the means for connecting the fixing element (14) and the cross-member (6) are means for fixing by adhesive bonding.

25 3. The frame as claimed in claim 1 or 2, wherein the tubular fixing element (14) is made of steel, especially stainless steel, or of a light metal alloy, especially aluminium.

30 4. The frame as claimed in any one of the preceding claims, wherein the indentation (12) opens at the two front faces (6₂) of the cross-member (6).

5. The frame as claimed in claim 4, wherein the tubular fixing element (14) has a front dimension (E) that is greater than the front dimension (e) of the cross-member.

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6. The frame as claimed in any one of the preceding claims, wherein the indentation (12) does not open at the side walls (6₃, 6'₃) of the cross-member (6), thereby to form two lateral end tabs (6₄, 6'₄) of the cross-member, bordering said recess (12).

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7. The frame as claimed in any one of the preceding claims, wherein the tubular fixing element (14) has side walls (14₂₁, 14₂₂) that delimit an opening (14₃) allowing access to said internal volume (V) forming the recess for receiving the protrusion (4₁).

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8. The frame as claimed in claim 7, wherein the tubular fixing element (14) is closed by a base (14₁) provided on the side opposite said opening (14₃).

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9. The frame as claimed in claim 7 or 8, wherein said side walls (14₂₁, 14₂₂) form a rectangle when viewed in transverse section.

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10. The frame as claimed in claims 2, 6 and 9, wherein the tubular fixing element (14) is adhesively bonded to the lateral end tabs (6₄, 6'₄) in the region of the short sides (14₂₂) of its side walls.

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11. The frame as claimed in any one of claims 2 to 10, wherein the tubular fixing element (14) comprises at least

one extension (15, 15') connected by adhesive bonding to facing walls of the cross-member.

12. The frame as claimed in claims 10 and 11, wherein the
5 or each extension (15, 15') extends from the intersection between a long side (14₂₁) and a short side (14₂₂) of the side walls of the tubular fixing element (14).

13. The frame as claimed in any one of claims 6 to 12,
10 wherein the retention means comprise a screw (18) which is mounted in one (6₄) of the lateral end tabs, the screw (18) being suitable for cooperating with a nut (20) accommodated in the intermediate fixing element (14), the screw bearing on the protrusion (4₁).

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14. The frame as claimed in any one of the preceding claims, wherein there are provided means for the mutual indexation of the protrusion (4₁) and of the cross-member (6), especially a resilient plate (16) which extends
20 partly into the internal volume (V) and has a bent limb (16₂) suitable for cooperating with a notched portion (4₄) formed in said protrusion (4₁).

15. The frame as claimed in claims 13 and 14, wherein the
25 indexation means (16) have a section (16₃) for laterally holding the nut (20).

16. The frame as claimed in any one of the preceding claims, wherein said protrusion (4₁) has, in the region of
30 one (4₅) of its side walls, at least one flat surface (4₆) for bearing on an opposing face of the tubular fixing

element (14), the or each bearing surface (4₆) extending only over a portion of the side wall (4₅).

17. A weaving machine (M) equipped with at least one
5 heald frame (2) as claimed in any one of the preceding claims.